



FIG. 47A-75

C1521 Probe Set

p	5-CTCTCTGCTCGTGGAGGGTAATAAAGG-NH2-3'	2450
i	5-GCTGCCCTTTCAATATCTTATCGAAC-3'	2451
a	3NH2-AGCAGAGGCCCTCCATTATTATTC-5'	2452

C2667 Probe Set

p	5-CTCTCTGCTCGTGTGATTCCTTAAGCCAG-NH2-3'	2453
i	5-CGGTCCAGGTCATCCCGAGAC-3'	2454
a	3NH2-AGCAGAGCAACATAAGAAATTCGGTC-5'	2455

G537 Probe Set

p	5-CTCTCTGCTCTCTCTGCTGGATGTTG-NH2-3'	2456
i	5-CTAAGTTTCAGGATGATGTTTCATGC-3'	2457
a	3NH2-AGCAGAGGAGACCACCTATACAAAC-5'	2458

T3192 Probe Set

p	5-CTCTCTGCTCAACTGTGTGGGC-NH2-3'	2459
i	5-TTAAGATCTGTAGCTTTCCGAAC-3'	2460
a	3NH2-AGCAGAGTTCACACACCCCG-5'	2461

Cartilage-derived morphogenic protein 1, human (h-CDMP1)
A831 Probe Set

p	5-CCGTCACGCGCTCCTGTTGCCCTCCC-(biotin)-3'	2462
i	5-AGCCTCCAACCTCACGCTGT-3'	2463
a	5-GGAGGCCAACAGGAGGCG-(biotin)-3'	2464

A1691 Probe Set

p	5-CCGCCGAGATCACTGAAGAGAGATGCTGATGG-(biotin)-3'	2465
i	5-ACACCACGTTGTTGGCAGAGTCAAG-3'	2466
a	5-CCATCAGCATCCTCTTCAGTATCTCGG-(biotin)-3'	2467

b-actin, rat (r-bACT)
C1671 Probe Set (longer)

p	5-CCGTCACGCGCTCGCCTAGAGGTTCA-NH2-3'	2468
i	5-TCTGGTCACTTTTTCACGGTTGA-3'	2469
a	3-GCGGAGCGGAATCCCAAGT-5'	2470
s	5-GAGGGGCTCGGTGAGC-3'	2471

FIG. 47A-76

Bile Salt port Pump, rat (r-BSEP)

p	FRET/TARGET SET 5	
p	5'-CCGCCGAGATCAGCAGTTCCTTGCCCTTC-(biotin)-3'	2472
i	5'-CCGCCGAGATCAGCAGTTCCTTGCCCTTC-NH3-3'	2473
a	5'-TTCACACACGCTTTCTCTGGTATCTCC-3'	2474
	3'-(biotin)-CTAGTGTCTCAAGAACGGAAAG-5'	2475

G1288 Probe Set

p	FRET/TARGET SET 2	
i	5'-CTCTCTCGTCTCCAGAAAGGCCAGT-(biotin)-3'	2476
a	5'-TTCTTCATCTAGGACAAGTGTGGAACCATAA-3'	2477
	5'-ACTGGCCTTCTGGGAGACG-(biotin)-3'	2478

A790 Probe Set

p	FRET/TARGET SET 6	
i	5'-CCGTCACGCGCTCTTCTCCTCATTTCTCCT-(biotin)-3'	2479
a	5'-CCCAATTTCCATTCTCATTTATTCTCCGGAAGTAAATC-3'	2480
	5'-AGGAGAATGAGGAAAGAGGCG-(biotin)-3'	2481

Nitric Oxide Synthase 2A, human (h-iNOS2)

A3418 Probe Set

p	FRET/TARGET SET 6	
i	5'-CCGTCACGCGCTCTGTCTTTCTTCGCG-(biotin)-3'	2482
a	5'-GCTGCACCGCCACCCG-3'	2483
	5'-GCGAAGAAAGACAGAGGCG-(biotin)-3'	2484

Neutral Carboxy Ester Hydrolase, human (h-NCEH)

A1221 Probe Set

p	FRET/TARGET SET 7	
p	5'-AACGAGGGCGCACTCTTCTTATTCCTCTG-B-3'	2485
i	5'-AACGAGGGCGCACTCTTCTTATTCCTCTG-NH2-3'	2486
s	5'-GTCTCAAAGTCCACCAAGTCTC-3'	2487
	5'-CAGGAGAAATGAAGAGTGCGC-(biotin)-3'	2488

A1221 Probe Set

p	FRET/TARGET SET 6	
p	5'-CCGTCACGCGCTCTCTTCTTATTCCTCC-3'	2489
i	5'-CCGTCACGCGCTCTCTTCTTATTCCTCC-NH2-3'	2490
a	5'-GTCTCAAAGTCCACCAAGTCTC-3'	2491
s	3'-GCGGAGAGAAGAATAAGAGG-5'	2492
	5'-TGGGATGGGTCCTGGGC-3'	2493

FIG. 47A-77

C1309. Probe Set

P	FRET/TARGET SET 8	
i	5'-GAACGGCAGGTTTGGCACCTCTGGCATT-NH2-3'	2494
a	5'-CAGGTAGGCCGTAGGTCCTGA-3'	2495
s	3'-NH2-CGTCCAAACCGTGAGAACCGTAA-5'	2496
	5'-GGCTCTGTGCTGGGCTA-NH2-3'	2497

Peroxisomal Proliferation Activator Protein Receptor alpha, human (h-PPAR_α)
G1480 Probe Set

P	FRET/TARGET SET 6	
i	5'-CCGTCACGGCCTCCCGACTCCGTCT-(biotin)-3'	2498
a	5'-CGGGTGCAGCGCAGCATT-3'	2499
	5'-AGACGGAGTCGGGAGGCG-(biotin)-3'	2500

A1044 Probe Set

P	FRET/TARGET SET 6	
i	5'-CCGTCACGGCCTCTGTCACTTGATCGTTCT-(biotin)-3'	2501
a	5'-TGGCCTCATAAACTCCGATTTTAGCAAG-3'	2502
	5'-AGAACGATCAAGTGACAGAGGCG-(biotin)-3'	2503

C 1311 Probe Set

P	FRET/TARGET SET 6	
i	5'-CCGCCGAGATCACGTGTCTACGTTAGAG-(biotin)-3'	2504
a	5'-CACATGTACAATACCTCTCGATTTTCAATC-3'	2505
	5'-CTCTAAACGTAGGACACGTGATCTCGG-(biotin)-3'	2506

Peroxisomal Proliferation Activator Protein Receptor beta, human (h-PPAR_β)
A595 Probe set

6B. Designed truncated probe and stackers to reduce temperature
FRET/TARGET SET 6

P	FRET/TARGET SET 6	
i	5'-CCGTCACGGCCTCTCTTCTGAATCTTGC-3'	2507
a	5'-CTGGCACTGTGGCGTTCTA-3'	2508
s	3'-NH2-GCGGAGAGAACTTAGAACG-5'	2509
	5'-AGCTGCGCTCACACTTCTCGT-3'	2510

6C. Design for new INVADER assay with 50% 2'-Me.

P	FRET/TARGET SET 6	
i	5'-CCGTCACGGCCTCTCTTCTGAATCTTG-NH2-3'	2511
a	5'-CTGGCACTGTGGCGTTCTA-3'	2512
s	3'-NH2-GCGGAGAGAACTTAGAAC-5'	2513
	5'-CAGCTGCGCTCACACTTCTCGT-NH2-3'	2514

FIG. 47A-78

6D. Truncate probe.

P	FRET/TARGET SET 6	
I	5'-CCGTCACGCCCTCTCTTCTGAATCTT-NH2-3'	2515
S	5'-CCTGGCACTTGTTGGGTTCTA-3'	2516
	5'-GCAGCTGCGCTCACCATTCTCGT-NH2-3'	2517

C391 Probe Set

P	FRET/TARGET SET 7	
I	5'-AACGAGGCGCACGGTAGGCATTGTAGA-3'	2518
A	5'-CCTTCTTTTGGTCATGTTGAAGTTTTCAC-3'	2519
S	3'-CGCGTGCCATCCGTAACATCT-5'	2520
	5'-TGTGCTTGAGAAGGCCCTTCA-3'	2521

Substance P, rat (r-SubP)

C344 Probe Set

P	FRET/TARGET SET 6	
I	5'-CCGTCACGCCCTCGCCACTGTTTTTCA-NH2-3'	2522
A	5'-CCATGCCCATAAAGAGCCTTTAAACAGGA-3'	2523
S	3'-NH2-GCGGAGCGGTGAACAAAAAGT-5'	2524
	NO STACKER	

A396 Probe Set

P	FRET/TARGET SET 6	
I	5'-CCGTCACGCCCTCTTTATGCCTTTGTGA-NH2-3'	2525
A	5'-TGCCATTAGTCCAAAGGAATCTGTA-3'	2526
S	3'-GCGGAGAAATACGGAACACT-5'	2527
	5'-GAGATCTGACCATGCCCATAAAGAGCC-NH2-3'	2528

C752 Probe Set

P	FRET/TARGET SET 7	
I	5'-AACGAGGCGCACGCTGGCAACTTGT-NH2-3'	2529
A	5'-CCTTCTGTCTTTGGAGACTTGCATCA-3'	2530
S	3'-NH2-GCGGTGCGACCGTTGAACA-5'	2531
	5'-ACAACTCCATCAACACTGTGCTTGCTG-NH2-3'	2532

Hepatic Lipase, human (h-LIPC)

A830 Probe Set

P	FRET/TARGET SET 7	
I	5'-AACGAGGCGCACCTCTAGGAAGTGCCA-NH2-3'	2533
A	5'-GTGCTGGGCAATATGTCTGTAGAGCG-3'	2534
S	3'-NH2-CGCGTGAGATCCTTCAACCGT-5'	2535
	5'-GCCAGGCTGGAAGGAGC-NH2-3'	2536

C1154 Probe Set

FRET/TARGET SET 5

FIG. 47A-79

p	5-CCGCCGAGATCACCCTCTCAGTTTGGT-NH2-3'	2537
i	5-CGAGTAGTGACATGGTAAAGTTGTTGTATTGGCT-3'	2538
a	3-NH2-CTCTAGTGCGCAGAGTCAAAACCA-5'	2539

Hepatic Lipase, rat (r-LIPC)
G357 Probe Set

p	FRET/TARGET SET 5	
i	5-CCGCCGAGATCACCACGTTTACCGGTT-NH2-3'	2540
a	5-GGGAGATCCAGTCCACTAATCCA-3'	2541
s	3-NH2-TCTAGTGTGCAAGTGCCCCAA-5'	2542
	5-GGGACTGTGCGGACTTCAGG-NH2-3'	2543

C1167 Probe Set

p	FRET/TARGET SET 8	
i	5-GAACGGCAGGTTTGGGAAATTTCTTATTCTT-NH2-3'	2544
a	5-ATTCCTTGCCCGAGGTGATG-3'	2545
s	3-NH2-GTCCAAACCCCTTAAAGAAATAAAGAA-5'	2546
	5-CTTTGTCTCCCGACGAGTGT-NH2-3'	2547

Metabotropic Glutamate Receptor 2, rat (r-mGluR2)

C1403 Probe Set

p	FRET/TARGET SET 7	
i	5-AACGAGGGCGACGGTGTGTGGGA-NH2-3'	2548
a	5-GCCTCATAGCATCGCAGAGGTGT-3'	2549
s	3-NH2-CGCCGTGCCACCAACCCCT-5'	2550
	5-CAGAGGGCACGGTGCAITGTTGT-NH2-3'	2551

G-protein coupled receptor 2, rat (r-ETBR-LP2)

A1629 Probe set

p	FRET/TARGET SET 8	
i	5-GAACGGCAGGTTTGTACAGACACCGC-NH2-3'	2552
a	5-GAGAGGGCCAAAGTGAGACCATGTGAAGAAGAAA-3'	2553
s	3-NH2-CGTCCAACAGTGTCTGCGC-5'	2554
	5-CATGGATCGGCATGGCCCC-NH2-3'	2555

i kappa b alpha, human (h-MAD3)

C542 Probe Set

p	FRET/TARGET SET 7	
i	5-AACGAGGGCGACGGTGTAGGGGGG-(biotin)-3'	2556
a	5-GCCCTGTCTACACAGGCAAT-3'	2557
	5-CCCCCTACACCGTGC-(biotin)-3'	2558

C363 Probe Set

FRET/TARGET SET 6

FIG. 47A-80

P	5'-CCGTCACGCGCTCGTCAGTGCCTTTTC-(biotin)-3'	2559
I	5'-CACCTGGCGGATCACCTCCATGT	2560
A	5'-GAAAAGGCACGTGACGAGGCG-(biotin)-3'	2561
G953 Probe Set		
P	FRET/TARGET SET 6	
I	5'-CCGTCACGCGCTCCCTCATCCTCACT-(biotin)-3'	2562
A	5'-ACTCTGACTCTGTGTCAATAGCTCTT	2563
	5'-AGTGAGGATGAGGAGGCG-(biotin)-3'	2564
C923 Probe Set		
P	FRET/TARGET SET 7	
I	5'-AACGAGGGCGGCACGGTTTCTAGTGCA-NH2-3'	2565
A	5'-CTCAGCTCTGTGGCAGCATCTGAAT-3'	2566
S	3'-NH2-CGCGTGGCCAAAAGATCACAGT-5'	2567
	5'-GCTGGGCCAGCTGC-NH2-3'	2568
Lecithin cholesterol acyltransferase, human (h-LCAT)		
C821 Probe Set (truncated Probe Design)		
P	FRET/TARGET SET 5	
I	5'-CCGCCGAGATCACGGTTATGCGCTG-NH2-3'	2569
a	5'-CCAGGGGGAGGTGTC-3'	2570
S	3'-NH2-TCTAGTGCCAAATACGCGACG-5'	2571
	5'-CTCCTCTTTCAGCTTGATGCTG-NH2-3'	2572
C827 Probe Design		
P	FRET/TARGET SET 8	
I	5'-GAACGGGACAGGTTGGGTGGTATGCG-NH2-3'	2573
a	5'-AGAGGGAAACATCCAGGGGAG-3'	2574
	3'-NH2-CGTCCAAACCCACCAACAATACGC-5'	2575
C1217 Probe Design		
P	FRET/TARGET SET 5	
I	5'-CCGCCGAGATCACGAGATGCTGATCCG-NH2-3'	2576
a	5'-GGTCAGGTTGCTGAAGACCATGTTG-3'	2577
	3'-NH2-TCTAGTGCTCTACGACATAGGG-5'	2578
Apolipoprotein A-1, human (h-ApoA1)		
A177 Probe Set		
P	FRET/TARGET SET 6	
I	5'-CCGTCACGCGCTCTGAGCACATCCACG-NH2-3'	2579
a	5'-ACATAGTCTCTGCCGCTGTCTTA-3'	2580
S	3'-NH2-GCGGAGACTCGTGTAGGTGC-5'	2581
	5'-TACACAGTGGCCAGGTCCTT-NH2-3'	2582

FIG. 47A-81

A227 Probe Set (titrate length of 2'-O-Me in Invader)

P	FRET/TARGET SET 8	
I	5'-GAACGGCAGGTTTGTCCCAAGGCGG-NH2-3'	2583
I	5'-GTCAAGGAGCCTTAGGTTTAGCTGTTA-3'	2584
I	5'-GTCAAGGATCTTAGGTTTAGCTGTTA-3'	2585
I	5'-GTCCAGTTGTCAAGGATCTTAGGTTAGCTGTTA-3'	2586
A	3'-NH2-GTCCAAACAGGGTCCGCC-5'	2587
S	5'-AGCCTTCAAACTGGGACACATAGTCTC-NH2-3'	2588

G350 Probe Set

P	FRET/TARGET SET 5	
I	5'-CCGCCGAGATCACCTTCTGTCCTT-NH2-3'	2589
a	5'-CTCCTGCCTCAGGCCG-3'	2590
S	3'-NH2-TC TAGTGGAGACAGAGAA-5'	2591
	5'-TTCAGGTTATCCAGAACTCC-NH2-3'	2592

G233 Probe Set

P	FRET/TARGET SET 11	
I	5'-AGAACGGCAGTCTTCTGTTTCCCAAGG-NH2-3'	2593
a	5'-CCAGTTGTCAAGGAGCTTAGGTTAGT-3'	2594
S	3'-NH2-CGTCAGAAAGACAAAGGGTCC-5'	2595
	5'-CGGAGCCTTCAAACTGGGACACATAGT-NH2-3'	2596

Metabotropic Glutamate Receptor 1, rat (r-mGluR1)

T934 Probe Set

P	FRET/TARGET SET 11	
I	5'-AGAACGGCAGTCTTAGAATAGGCGATCTGT-NH2-3'	2597
a	5'-CACTCAGGTCATGCTGTGGCT-3'	2598
S	3'-NH2-GTCAGAACTTATCCGCTAGACA-5'	2599
	5'-GGGATGTCGAACAGCTGGAGAAAGATTCT-NH2-3'	2600

Ubiquitin, human (h-UBI1)

G119 Probe Set (MO4 Arm)

P	FRET/TARGET SET 6	
I	5'-CCGTCACGCCCTCCTTACATTTTCTATCGTATCCG-(biotin)-3'	2601
a	5'-CCTTCCTTATCCTGGATCTGGCA-3'	2602
	3'-(biotin)-GCGGAGGAAATGTAAAGATAGCATAGGC-5'	2603

G119 Probe Set

P	FRET/TARGET SET 5	
I	5'-CGCCGAGATCACCTTACATTTTCTATCGTATCCG-(biotin)-3'	2604
a	5'-CCTTCCTTATCCTGGATCTGGCA-3'	2605
	3'-(biotin)-CTAGTGGAATGTAAAGATAGCATAGGC-5'	2606

FIG. 47A-82

G131 Probe Set

P	FRET/TARGET SET 9	
I	5'-CATCTTCGCGGACTGGATCTTGGCC-(biotin)-3'	2607
I	5'-GCTGATCAGGAGGAATTCCTTCCTATCT-3'	2608
a	3'-(biotin)-GCCTGACCTAGAACCGG-5'	2609

Scanned G119 region (ELISA format (No Arrestors))

P	5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCGA-NH2-3'	2610
P	5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3'	2611
P	5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3'	2612
P	5'-CTCTCTCGTCTCTTACATTTTCTATCGTATC-NH2-3'	2613
I	5'-CTCTCTCGTCTCGCCTTACATTTTCTATCG-NH2-3'	2614
I	5'-GGAATTCCTTCCTTATCCTGGATCCTTGA-3'	2615
I	5'-GGAATTCCTTCCTTATCCTGGATCCTTGGC-3'	2616
I	5'-CCTTCCTTATCCTGGATCCTTGGCA-3'	2617
I	5'-TTCCTTATCCTGGATCCTTGGCCA-3'	2618
I	5'-TCCTTATCCTGGATCCTTGGCCTA-3'	2619

Ubiquitin, mouse (m-UBI1)

G294 Probe Set

P	FRET/TARGET SET 7	
I	5'-CCGTCACGCCCTCCCTTCTGGATGTTGTA-(biotin)-3'	2620
I	5'-CCAGGTGCAGGGTTGACTA-3'	2621
a	3'-(biotin)-GCGGAGGGGAAGACCTACAACAT-5'	2622

G294 Probe Set

P	FRET/TARGET SET 5	
I	5'-CGCCGAGATCACCCCTTCTGGATGTTGTA-(biotin)-3'	2623
I	5'-CCAGGTGCAGGGTTGACTA-3'	2624
a	3'-(biotin)-CTAGTGGGAAGACCTACAACAT-5'	2625

G294 Probe Set

P	FRET/TARGET SET 6	
I	5'-CCGTCACGCCCTCCCTTCTGGATGTTGTAAT-NH2-3'	2626
I	5'-CCAGGTGCAGGGTTGACTA-3'	2627
a	3'-NH2-GCGGAGGGGAAGACCTACAACATTA-5'	2628

FIG. 47A-83

G294 Probe Set

P	FRET/TARGET SET 6	2629
I	5'-CCGTCACGCCCTCCCTTCTGGATGTTGTAATC-NH2-3'	2630
A	5'-CCAGGTGCAAGGTTGACTA-3'	2631
	3'-NH2-GCGGAGGGAAAGACCTACAAACATTAG-3'	

T514 Probe Set

P	FRET/TARGET SET 7	2632
I	5'-AACGAGGCGGCACATGTTGTAATCAGAGAGGG-NH2-3'	2633
A	5'-TGCAGGGTTGACTCTTCTGGA-3'	2634
	3'-NH2-CGCGTGTACAAACATTAGTCTCTCCC-5'	

G750 Probe Set

P	FRET/TARGET SET 9	2635
I	5'-CATCTTCGCGGACCTTCTGGATGTTGTA-NH2-3'	2636
A	5'-GGACCAGGTGCAGGGTTGACTT-3'	2637
	3'-NH2-GCCTGGAAGACCTACAAACAT-5'	

G185 Probe Set

P	FRET/TARGET SET 9	2638
I	5'-CATCTTCGCGGACCTTCACGTTCTCGATGG-NH2-3'	2639
A	5'-CCCTCTTTATCCTGGATCTTGGCA-3'	2640
	3'-NH2-GCGCCTGAAGTGCAAGAGCTACC-5'	